

**SPECIFICATION** 



#### Features:

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / BSMI / CCC / CB / FCC / CE
- Class I power ( with earth pin)
- LED indicator for power on
- No load power consumption<0.5W</li>
- ENERGY STAR compliant
- Meet EISA 2007(Energy Independence and Security Act)
- · 2 years warranty



ORDER NO.		GS160A12-R7B	GS160A15-R7B	GS160A20-R7B	GS160A24-R7B	GS160A48-R7B	
ОИТРИТ	SAFETY MODEL NO.	GS160A12	GS160A15	GS160A20	GS160A24	GS160A48	
	DC VOLTAGE	12V	15V	20V	24V	48V	
	RATED CURRENT	11.5A	9.6A	8A	6.67A	3.34A	
	CURRENT RANGE	0 ~ 11.5A	0~9.6A	0~8A	0 ~ 6.67A	0 ~ 3.34A	
	RATED POWER (max.)	138W	144W	160W	160W	160W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	
	VOLTAGE TOLERANCE Note.3	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%	
	LINE REGULATION Note.4	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%	
	SETUP, RISE TIME Note.6	2000ms, 20ms / 230VAC	2500ms, 20ms / 1	15VAC at full load	-		
	HOLD UP TIME (Typ.)	20ms / 230VAC 20ms / 115VAC at full load					
INPUT	VOLTAGE RANGE Note.7	85 ~ 264VAC 120 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95 / 230VAC PF>0.98 / 115VAC at full load					
	EFFICIENCY (Typ.)	89%	90%	92%	92.5%	94%	
	AC CURRENT	1.85A / 115VAC 1A / 230VAC					
	INRUSH CURRENT (max.)	120A / 230VAC					
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power					
	OVERLOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed					
	OVED VOLTAGE	105 ~ 135% rated output voltage					
	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover					
	OVED TEMPEDATURE	90°C ±10°C (RTH2) detect on inside ambient temperature					
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03% / °C (0~50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1	cycle, period for 60min	each along X, Y, Z axes			
SAFETY & EMC (Note. 5)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved					
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022(CISPR22) ,EN61204-3 class B, CNS13438 class B, GB9254-1 class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,3, GB17625.1					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A					
	MTBF	290.3Khrs min. MIL-HDBK-217F(25°C)					
OTHERS	DIMENSION	175*72*35mm (L*W*H)					
	PACKING	0.66Kg; 20pcs/ 14.2Kg/ 0.85CUFT					
CONNECTOR	PLUG	See page 2; Other type available by customer requested					
CONNECTOR	CABLE	See page 2; Other type available by customer requested					

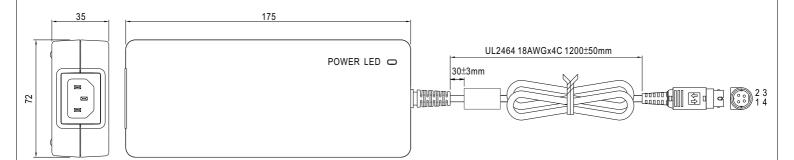
#### NOTE

- 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.
- 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- 3. Tolerance: includes set up tolerance, line regulation, load regulation.
- 4.Line regulation is measured from low line to high line at rated load.
- 5.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- 6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
- 7. Derating may be needed under low input voltage. Please check the derating curve for more details.



### **■** Mechanical Specification

Case No.997A Unit:mm



# ■ Plug Assignment

#### Standard plug: R7B

R7B						
	PIN NO.	OUTPUT				
2 ((0 0)) 3	1,4	+V				
	2,3	-V				
AC FG						

-V connected to AC FG

## **■** Derating Curve

#### 230VAC 100 80 60 100VAC 50 LOAD (%) 40 20 -30 50 (HORIZONTAL) 10 20 70 AMBIENT TEMPERATURE (°C)

### **■** Static Characteristics

